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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,638	09/13/2001	Christian Kirsten	H3544PCT/US	6355
423	7590	09/21/2004	EXAMINER	
HENKEL CORPORATION THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. GULPH MILLS, PA 19406			WYROZEBSKI LEE, KATARZYNA I	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/857,638	KIRSTEN ET AL.	
	Examiner	Art Unit	
	Katarzyna Wyrozebski	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12, 13 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 13 and 16-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0604</u> . | 6) <input type="checkbox"/> Other: _____ |

In view of Applicant's submission of IDS dated 6/30/2004 there was an applicable document found, which document is now utilized in new rejection. Since such new rejection constitutes new grounds, a non-final office action is issued. Updated search report also provided addition application by the inventor, which applications were evaluated for double patenting.

In view of applicant's argument, the prior art of CZAPLICKI is hereby overcome. The prior art of KOMAGATA is not overcome and is incorporated here by reference.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 12, 13, 16-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of copending

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Application No. 10/343297 ('297). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following explanation.

Co-pending application '297 teaches a process for adhesive composition. The composition of '297 comprises superparamagnetic particles and binder matrix (claim 1). The particles are nano-particles having diameter of 1-500 nm (claim 2). The polymers of the composition of '297 are selected from ethylene/vinyl acetated, rubbers, polyesters, polyurethanes and the like. The composition taught by '297 encompasses the composition of the present invention.

In the light of the above disclosure, it would have been obvious to one having ordinary skill in the art at the time of the instant invention that in order to practice the process of '297 composition disclosed in present invention has to be known.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 12, 13, 16, 17, 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Komagata (US 5,714,238).

The prior art of Komagata discloses conductive adhesive composition. According to the claims of the prior art of Komagata, the adhesive composition comprises epoxy resin, phenolic resin and conductive particles.

According to the claim 1 of Komagata, conductive particles include nickel and nickel-boron alloy. Nickel, satisfies the requirements of the present invention.

According to claim 2, the particle size of the conductive particles is 0.1-30 microns, which is equivalent to 100-30,000 nm.

Col. 5, lines 8-15 of Komagata discloses that the amount of the conductive particles is in a range of 30-45 % when the particles have spherical shape. When particles have scaly shape their amounts are much smaller in the order of 2-65 wt%.

The prior art of Komagata also discloses use of other additives such as surface treating agents (col. 3-4), dispersing aids or silane coupling agents (col. 7, lines 17-27).

In a method of making the adhesive, the components are mixed together, which in turn implies that they have to be combined (col. 7, lines 28-35). The adhesive is then formulated onto a substrate and used to bind together electronic parts.

In the light of the above disclosure, the prior art of Komagata anticipates claims rejected above.

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5. Claims 12, 13, 16-18, 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by PILGRIM (DD 1589 73) [translation provided by the applicants].

The prior art of PILGRIM discloses adhesive composition comprising magnetic particles and resin binder.

According to claims of PILGRIM, particles are super paramagnetic and include compounds such as nickel, cobalt and their alloys or iron oxides.

The particles size of the super paramagnetic compounds is in a range of 5-50 nm and their amount is in a range of 5-90 wt%.

Resins utilized in the composition of PILGRIM include epoxy, polyesters, hydrocarbon resins such as styrene, vinyltoluene and the like, phenolic resins, amino resins, silicone resins and the like.

In the light of the above disclosure, the prior art of PILGRIM anticipates requirements of claims rejected above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Komagata (US 5,714,238) or PILGRIM (DD 1589 73) either one of which in view of JP 06215927 (Abstract only)

The discussion of the disclosure of prior art of KOMATA or PILGRIM from paragraphs 4 and 5 of this office action is incorporated here by reference.

The difference between the present invention and disclosure of KOMATA or PILGRIM is use of ethylene/vinyl acetate polymer as binder.

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With respect to the above argument, the JP prior art teaches magnetic adhesive with binder. The binders of JP disclosure include epoxy, PVC, silicon resins, rubbers, polyamide, polyesters, ethylene/vinyl acetate, polycarbonates, polystyrenes and the like.

Use of EVA copolymer would result in formation of adhesive suitable for use with magnetic particles.

In the light of the above disclosure, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize EVA of JP disclosure in the composition of KOMAGATA or PILGRIM and thereby arrive at the present invention. Use of EVA copolymer would provide an adhesive.

10. In the arguments submitted on 6/30/2004 the applicants argued that the prior art of KOMAGATA does not teach paramagnetic particles.

With respect to the above argument, and applicant's own definition of super paramagnetic particles in co-pending application 10/343297, nickel and nickel alloys are clearly defined as particles having super paramagnetic properties. Per applicant's own teaching, this prior art is not withdrawn.

In addition, KOMAGATA refers to the particles of Nickel as conductive, which means that in order to conduct they have to have one unpaired electron. That makes them at least paramagnetic.


11. Further arguments with respect to the prior art of CZAPLICKI are considered moot due to discontinuation of this prior art against present claims.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Katarzyna Wyrozebski
Primary Examiner
Art Unit 1714

September 14, 2004